FN10/100 and ELS10/100

Supports Management Module SM-CSI1064

APRISMA
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Device Management

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Introduction

This section introduces the SPECTRUM Device Management documentation for the FN and ELS devices.

This introduction to the Device Management documentation for the FN and ELS devices contains the following information:

- *Purpose and Scope*
- *Required Reading*
- *Supported Devices on Page 6*
- *The SPECTRUM Model on Page 7*

Purpose and Scope

Use this documentation as a guide for managing Cabletron's FN10, FN100, ELS10, and ELS100 switches with the management module SM-CSI1064. The documentation describes the icons, menus, and views that enable you to remotely monitor, configure, and troubleshoot devices through software models in your SPECTRUM database. Only information specific to the supported management module is included under this topic.

For more information about device management using SPECTRUM and for explanations of basic SPECTRUM functionality and navigation techniques, refer to the documentation listed under *Required Reading*.

Required Reading

To use this documentation effectively, you must be familiar with the information covered by these other SPECTRUM online documentation topics:

- ***Getting Started with SPECTRUM for Operators***
- ***Getting Started with SPECTRUM for Administrators***
- ***How To Manage Your Network with SPECTRUM***
- ***SPECTRUM Views***
- ***SPECTRUM Menus***
- ***SPECTRUM Icons***

Supported Devices

The SPECTRUM management module SM-CSI1064 allows you to model Cabletron's FN and ELS switches. The FN10 and FN100 are earlier Fast Network switches; the ELS switches are similar to the FN10 and FN100 but use a current firmware revision. The switches are described below.

FN10 Ethernet Switch

The FN10 Ethernet switches offer two optional Fast Ethernet ports. The FN10 switches accelerate network performance by creating independent Ethernet connections, each with 10 Mbps of bandwidth.

FN100 Fast Ethernet Switch

The FN100 Fast Ethernet switches combine high-performance switching with the flexibility of mixed 10/100 Mbps operation. The FN100 contains an address database engine that filters/forwards traffic to the ports on the device. Additionally, the FN100 supports up to eight 192 MAC addresses, contains full store-and-forward functionality and is protocol transparent.

ELS10 Ethernet Switches

The ELS10 switches are described below. These switches operate in a modified cut-through mode that increases performance for larger packets.

CSI_ELS10

The CSI_ELS10 is a 16 port Ethernet switch. When modeled, the CSI_ELS10 is represented by the ELS10-26 model type; the CSI_ELS10 is being replaced in a later release by the ELS10-26, which will use a different firmware revision.

ELS10-26TX

The SmartSTACK ELS10-26TX is a 24-port 10Mbps Ethernet switch with two additional Fast Ethernet uplink ports; one fixed 100 Base-TX (RJ45) and an optional Fast Ethernet Port Interface Module slot (FE-PIM).

ELS10-27TX

The SmartSTACK ELS10-27TX is a 24-port 10Mbps Ethernet switch, which uses an ASIC-based switching engine. The switch has three 10/100Mbps Autonegotiating ports with two slots for multimode fiber uplinks, for a total of 27 ports. All ports have wire speed switching, and full duplex operation on all ports.

ELS100 Fast Ethernet Switches

The ELS100 switches automatically set each port for half or full duplex modes of operation. The ELS100 switches contain up to 24 RJ-45 switched ports for high-end desktop, workgroup, and local backbone applications. The ELS100 switches support RMON Statistics, Alarms, Events, and History functions.

The different models of the ELS switches are described below.

ELS100-16TX

The ELS100-16TX has 16 switched 10/100Mbps ports and is modeled with the CSI_ELS100 model type. The ELS100-16TX provides support for two Fast Ethernet fiber optic ports, via two optional Ethernet Port Interface Modules (EPIM-100FX).

ELS100-24TX

The SmartSTACK ELS100-24TX has 24 switched 10/100Mbps ports and wire-speed throughput in both half and full duplex modes.

ELS100-24TXM

The SmartSTACK ELS100-24 TXM has 24 ports with one modular fiber uplink slot.

ELS100-24TXG

The ELS 100-24 TXG is used to aggregate small workgroups of lower-speed devices. It offers two Gigabit Ethernet uplinks.

The SPECTRUM Model

The SPECTRUM model type names, and the represented FN or ELS switches, are shown below:

- ***CSI_FNET10*** *(FN10 Ethernet switch)*
- ***CSI_FNET100*** *(FN100 Fast Ethernet switch)*
- ***CSI_ELS10*** *(CSI_ELS10/ELS10-26 Ethernet)*
- ***CSI_ELS100*** *(ELS100-16TX Fast Ethernet)*
- ***Els100_Tx*** *(ELS100-24TX Fast Ethernet)*
- ***Els100_TxG*** *(ELS100-24TXG Fast Ethernet)*
- ***Els100_TxM*** *(ELS100-24TXM Fast Ethernet)*

As shown in Figure 1 on Page 8, the appearance of the Device icon varies slightly depending on the view in which it appears.

Figure 1: Device Icons

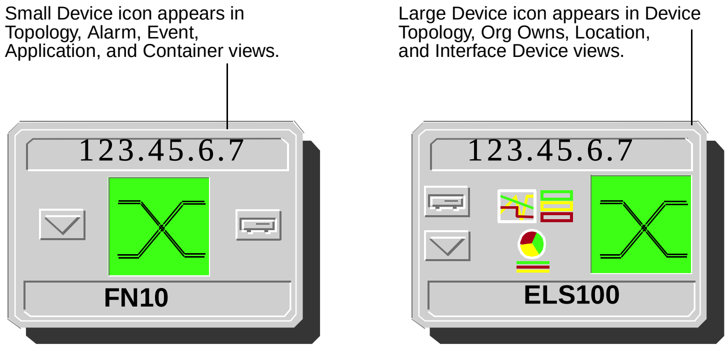


Figure 2: ELS Device Icon in Topology View

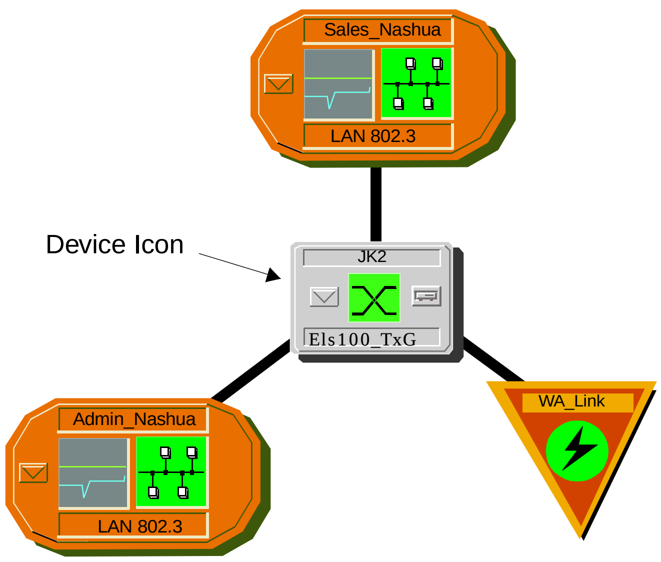


Figure 2 shows a portion of a Topology view in which the Device icon representing the ELS model appears surrounded by icons representing the network entities which the device connects—in this case two Ethernet LANs and an Off-Page Reference icon representing a Wide Area Link to a corporate network.

Device icons provide access to the views, subviews, and tables that let you manage the modeled device. The views listed below are accessible directly from this menu and are described individually in subsequent sections of this documentation.

- *Device Views (Page 11)*
- *Device Topology View (Page 18)*
- *Application View (Page 19)*
- *Performance Views (Page 27)*
- *Configuration Views (Page 30)*
- *Model Information Views (Page 32)*

Tasks

This section lists device management tasks alphabetically and provides links to descriptions of the views and/or tables used to perform the task.

Configuring Device Interfaces

- *Interface Configuration View* on Page 31

Enabling/Disabling a Port

- *Admin Status* on Page 14

Enabling/Disabling Trap Events

- *Generic Interface Trap Configuration View* on Page 31

General/Communications Information

- *Model Information Views* on Page 32

Mirroring Port Traffic

- *Port Mirror Configuration View* on Page 25

Model Redundancy Configuration

- *Device Configuration View* on Page 30

Monitoring Interface/Port Operations

- *Interface Device View* on Page 11
- *Performance Views* on Page 27
- *Application View* on Page 19
- *Interface Icon Subviews Menu Options* on Page 14

Resolving Port Connections

- *Device Topology View* on Page 18

Setting Alarms on Link Down Traps

- *Generic Interface Trap Configuration View* on Page 31

Setting Interface Thresholds

- *Port Mirror Configuration View* on Page 25

Device Views

This section describes the Device views and subviews available for the FN and ELS switches in SPECTRUM.

Device views use icons and labels to represent the modeled device and its components, such as modules, ports, and applications. The three types of Device views for this management module are:

- *Logical Device view (described in the **SPECTRUM Portable Management Application** documentation)*
- *Interface Device View (Page 11)*
- *Chassis Device View (Page 15) (available for the ELS 100 series)*

Interface Device View

Access: *From the **Icon Subviews** menu for the Device icon, select **Device > Interface.***

This view provides dynamic configuration and performance information for each of the device's serial/network I/O ports, which are represented by Interface icons in the bottom panel of the view, as shown in Figure 3. The middle panel of the view also displays a Device icon, which allows you to monitor the device's operation and access other device-specific views.

Figure 3: Interface Device View

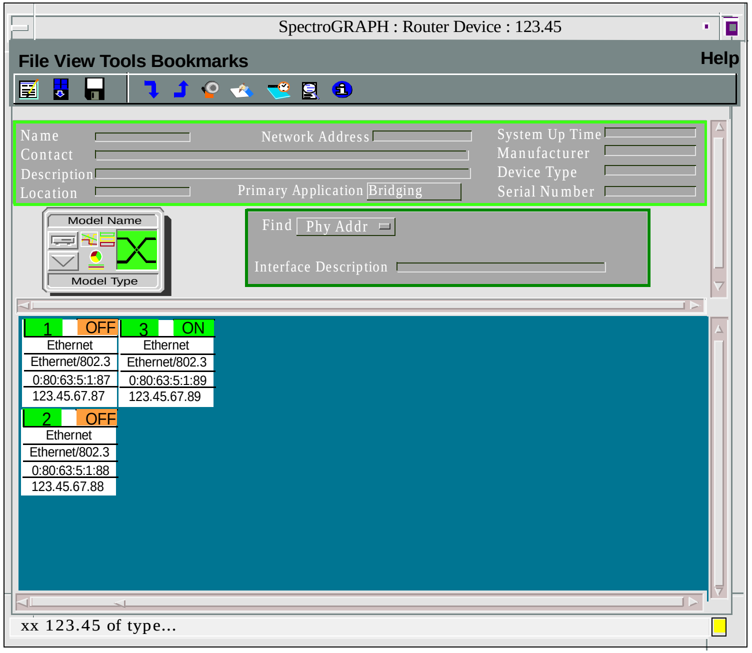
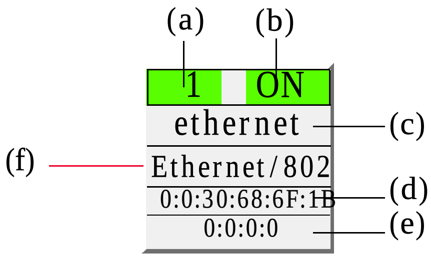


Figure 4: Interface Icon



- **a** Interface Number Label
- **b** IF Status Label
- **c** Interface Type Label
- **d** Physical Address Label
- **e** IP Address Label
- **f** Network Type Label

Interface Icons

Figure 4 shows a close-up of an Interface icon from an Interface Device view. Most of the informational labels on the icon also provide double-click access to other views, as explained in the following label descriptions.

Interface Number Label

This label displays the interface number.

IF Status Label

This label displays the current Operational Status of the interface (see Table 1). Note that the background color of the label also depends on the interface's current IF Status, which is set by the user in the *Interface Status View* (Page 14). This view can be accessed by double-clicking the label.

Table 1: Interface Status Label Colors

Color	Operational Status	Administrative Status	Label Text
Green	ON	ON	ON
Blue	OFF	OFF	OFF
Yellow	OFF	ON	OFF
Red	Testing	Test	Test

Interface Type Label

This label identifies the type of interface—e.g., Ethernet, Other, etc. Double-click this label to access the *Interface Configuration View* (Page 31).

Physical Address Label

This label displays the physical (MAC) address of the interface. Double-click the label to open the Interface Address Translation table, which cross-references network addresses (IP addresses) to physical (MAC) addresses for selected nodes between networks.

Double-clicking any column entry opens an address-specific Address Translation Table view. This view provides the same information as the corresponding row for the Interface Address Translation table, but allows you to modify field values.

IP Address Label

This label displays the IP address for the interface. Double-click the label to open the *Secondary Address Panel View* (Page 14), which allows you to change the address and mask for this interface.

Network Type Label

This label identifies the type of network the interface is connected to. Double-click the label to open the *Generic Interface Model Information view*, described on Page 32.

Interface Icon Subviews Menu Options

Table 2 shows the Icon Subviews menu options available for the Interface icon.

Table 2: Interface Icon Subviews Menu

Option	Opens the...
Performance	Interface Performance View on Page 28.
Detail	Shows packet, error, and discard Breakdown pie charts information, described under ***SPECTRUM Views***.
IF Status	*Interface Status View* (Page 14).
IF Configuration	Provides interface-specific configuration information; refer to Page 31.
Model Information	Shows the Model Information view for the selected interface; refer to Page 32.
IF Address Translation Table	Interface Address Translation Table view, which shows the Physical and Network address for each interface.
Secondary Address Panel	*Secondary Address Panel View* (Page 14).
Thresholds	*Interface Threshold view*, which allows you to view and set the on/off alarm thresholds for load, packet rate, error rate, and % discarded.

Interface Status View

Access: *From the **Icon Subviews** menu for the Interface icon in the Interface Device view, select **IF Status**.*

This view displays port-specific information for this device.

Operational Status

Displays the current operating state of the port. This state is set using the Admin Status button described below. Possible values are `Up` or `Down`.

Admin Status

This button allows you to change the current administrative state of the port Possible values are `Default`, `On`, `Off`, or `Test`.

Secondary Address Panel View

Access: *From the **Icon Subviews** menu for the Interface icon in the Interface Device view, select **Secondary Address Panel**.*

This panel provides a table of IP addresses and masks obtained from the Address Translation table within the device’s firmware. You can change the current address displayed in the **IP Address** field by selecting an entry from the table in this panel and clicking the **Update** button.

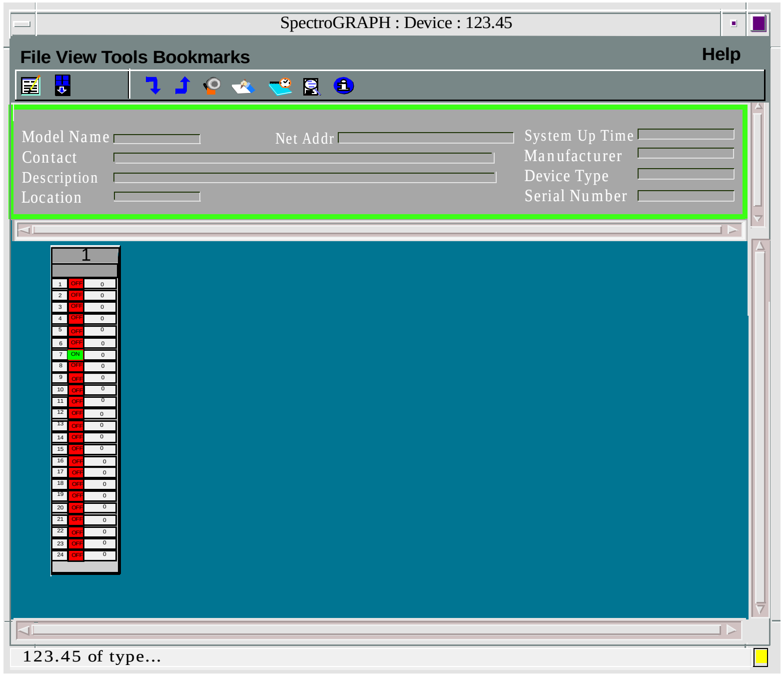
Chassis Device View

(The Chassis Device view is only available for the three ELS 100 switches.)

Access: *From the* ***Icon Subviews*** *menu for the Device icon, select* ***Device > Chassis****.*

This view (Figure 5) contains icons that represent the various physical modules installed within the chassis of the modeled device. Each Module icon identifies the type of module and its slot location. Individual ports on the modules are represented by smaller icons that dynamically display current operational status.

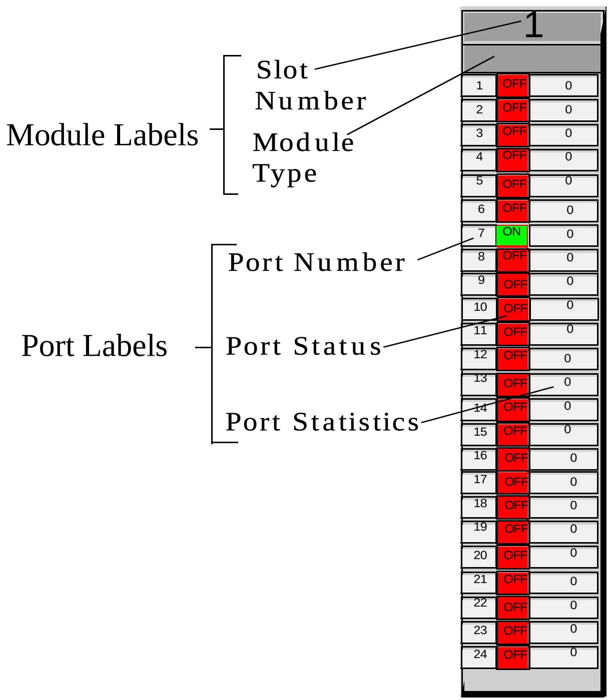
Figure 5: ELS100_Tx Chassis Device View



Module Icons

Figure 6 shows a close-up of a Module icon from a Chassis Device view. Note that there are two types of labels on the icon: those that apply to the module as a whole, and those that apply to individual ports on the module.

Figure 6: Module Icon



Module Labels

The following two labels are located at the top of each Module icon:

- **Slot Number** - The location of the module within the chassis. Also provides double-click access to the Module Notes view (see Table 3).
- **Module Type** - The type of module in the chassis slot—e.g., ethernet, modem, motherboard, etc.

Module Icon Subviews Menu

Table 3 lists the Icon Subviews menu options for the Module icons.

Table 3: Module Icon Subviews Menu

Option	Opens the . . .
Performance	Module Performance view, which provides cumulative port statistics for this module.
Module Notes	Notes view, which allows you to make, revise, save, retrieve, and mail annotations about the selected module.
Switch Information	System Information View on Page 22, which provides system identification and switching information.

Port Labels

As shown in Figure 6, each selectable port label on a module icon comprises three smaller labels as described below. Clicking on any of these labels highlights the whole port label so that you can access the port-specific menu options listed in Table 4.

- **Port Number** - Identifies a particular port. Double-click this label to open a Port Notes view that allows you to make, revise, save, retrieve, and mail annotations about the port.
- **Port Status** - Displays the current operating status of the port and the corresponding color for that status (green if the port is up, red if the port is down or in test mode).
- **Port Statistics** - Displays the number of frames (packets) transmitted or received by this port since the last reset. Double-click this label to open the *Port Table Information View* (Page 23).

Port Label Icon Subviews Menu

Table 4 lists the Icon Subviews menu options for port labels within the Chassis Device view.

Table 4: Port Icon Subviews Menu Options

Option	Opens the . . .
Performance	*Port Performance view*, which provides load, frame rate, and error statistics for the selected port.
Port Notes	Notes view, which allows you to make, revise, save, retrieve, and mail annotations about the selected port.
Port Information	*Port Table Information View* (Page 23), which provides a table with frames forwarded, received, and other information for the selected port.

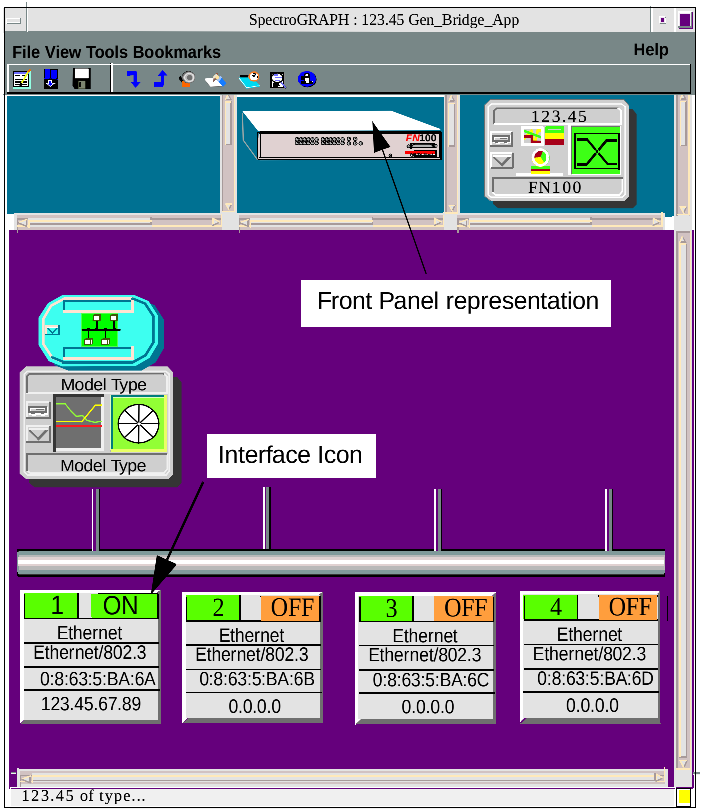
Device Topology View

This section provides a brief description of the Device Topology view available for models of the FN and ELS switches.

Access: *From the* ***Icon Subviews*** *menu for the Device icon, select* ***DevTop.***

Device Topology views show the connections between a modeled device and other network entities. Additionally, you can resolve port connections in this view. Figure 7 shows an example of the FN100 Device Topology view. The lower panel of the view uses interface icons to represent the device's serial/network I/O ports. These icons provide the same information and menu options as those in the *Interface Device View* (Page 11). If there is a device connected to a particular interface, a device icon appears on the vertical bar above the interface icon along with an icon representing the network group that contains the device.

Figure 7: Device Topology View



Application View

This section describes the Application view and the associated application-specific subviews available for models of FN and ELS switches in SPECTRUM.

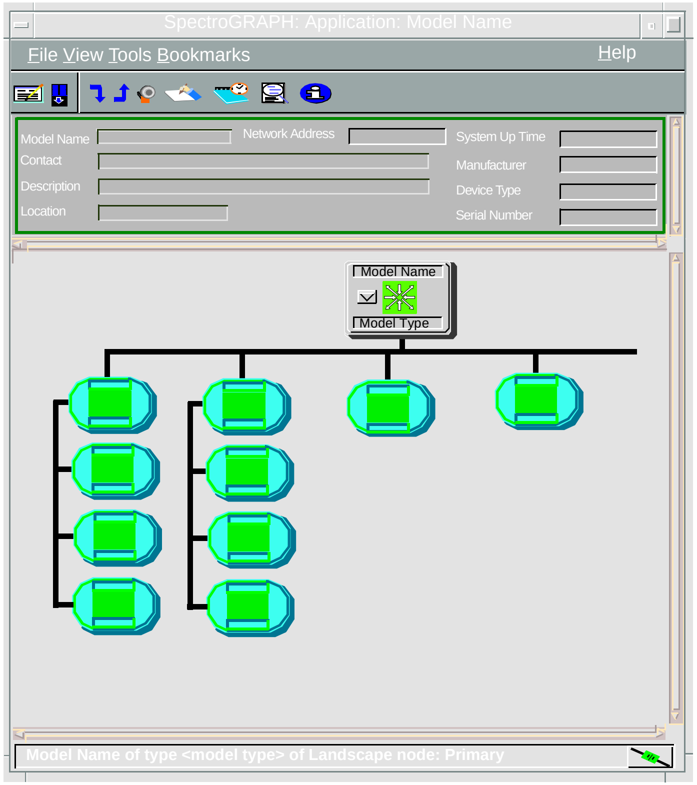
Access: *From the **Icon Subviews** menu for the Device icon, select **Application.***

Main Application View

When a device model is created, SPECTRUM automatically creates models for each of the major and minor applications supported by the device. The main Application view identifies all of these application models, shows their current condition status, and provides access to application-specific subviews. Figure 8 shows this view in the Icon mode. If you prefer the List mode, which displays applications as text labels, select **View > Mode > List**.

For more information on this view, refer to the ***MIBs and the Application View*** document.

Figure 8: Main Application View



Supported Applications

SPECTRUM's applications can be grouped within two general categories as follows:

- Applications associated with non proprietary MIBs. See *Common Applications* below.
- Applications associated with device-specific MIBs. See *Device-Specific MIBs* (Page 21).

Common Applications

For the most part, these applications represent the non proprietary MIBs supported by your device. Listed below (beneath the title of the SPECTRUM document that describes them) are some of the common applications currently supported by SPECTRUM.

Note: The documents listed below (in bold font) are available for viewing at: www.aprisma.com/manuals/

- ***Routing Applications***
  - Generic Routing
  - Repeater
  - AppleTalk
  - DECnet
  - OSPF
  - OSPF2
  - BGP4
  - VRRP
- ***Bridging Applications***
  - Ethernet Special Database
  - Spanning Tree
  - Static
  - Transparent
  - PPP Bridging
  - Source Routing
  - Translation
  - QBridge
- ***MIB II Applications***
  - SNMP
  - IP
  - ICMP
  - TCP
  - System2
  - UDP
- ***Transmission Applications***
  - FDDI
  - Point to Point
  - DS1
  - DS3
  - RS-232
  - WAN

  - Frame Relay
  - Token Ring
  - Ethernet
  - Fast Ethernet
  - rfc1317App
  - rfc1285App
  - rfc1315App
  - 802.11App
  - SONET
- ***Technology Applications***
  - APPN
  - ATM Client
  - DHCP
  - PNNI
  - rfc1316App
  - DLSw

Device-Specific MIBs

SPECTRUM imports the following device-level proprietary MIBs into its database:

- ctFN10-mib
- ctFN100-mib

These MIBs can be used in conjunction with SPECTRUM's optional customization products (referred to as the Level I Tool Kits) to create application models and views that display the condition of selected MIB objects.

Note: Aprisma Management Technologies can provide training, technical assistance, and custom engineering support services for creating application models and their associated views.

The following device-specific applications are described in the remainder of this section.

- *System Information View*
- *Switch Manager View (Page 23)*
- *Port Table Information View (Page 23)*
- *VLAN Table Information View (Page 24)*
- *Port Mirror Configuration View (Page 25)*
- *VLAN Port Table Information View (Page 25)*
- *Port Priority Table Information View (Page 26)*

ELS100-24 Application (ELS100_TxApp)

A single major application for the ELS 100-24 switches has the following application-specific subviews:

- *System Information View (Page 22)*
- *Switch Manager View (Page 23)*
- *Port Table Information View (Page 23)*
- *VLAN Table Information View (Page 24)*
- *Port Mirror Configuration View (Page 25)*
- *VLAN Port Table Information View (Page 25)*
- *Port Priority Table Information View* (Page 26)

System Information View

Access: *From the* ***Icon Subviews*** *menu for the Application icon, select* ***System Information.***

This view provides system-level configuration information.

Sys Serial no

The serial number of the system.

Tftp IP Address

The IP address of the TFTP server from which a software download is to be initiated. This variable must be set before a TFTP download can be started.

Tftp Filename

The name of the software upgrade file residing on the TFTP server. Path information must be included in the file name. This variable must be set before a TFTP download can be started.

Brcast Cutoff Rate

The Broadcast Cutoff Rate of the switch controlling broadcast storms. The value of this variable sets a per second rate. If the broadcast and unknown destination address frames being forwarded through the system surpass this rate, they are dropped. Valid values for this parameter are in the range (100 to 500000).

Switch IP Address

The IP address of the ELS device.

Switch Subnet Mask

The subnet mask associated with the IP address of the system.

Gateway IP Address

The IP address of the next hop router (gateway) to which frames destined for an IP subnet are sent.

Tftp Start Download

Start a TFTP download. A SET of this variable with the value download initiates a TFTP download to upgrade the system software. The variables TFTP IP Address and TFTP Filename must be configured before a download can begin.

A GET of this variable will always return the value noDownload.

BootP Dhcp Enabled

Enable or disable the operation of the BootP and DHCP protocols on the system. These protocols are used for automatically configuring the system's IP address information if a properly configured BootP and/or DHCP server exists on the network.

System Reset

Initiates a software reset of the system. Values are Reset or noReset.

Powerup Count

The total number of times the system has powered up since manufacture.

Switch Manager View

Access: *From the **Icon Subviews** menu for the Application icon, select **Switch Manager.***

This view provides trap information for the four SNMP managers on this system.

Trap Rcvr (#1,2,3,4)

The IP address for each of the four SNMP managers to which traps are sent.

Trap Community (#1,2,3,4)

The community name for each of the four SNMP managers to which traps are sent. The default value is public.

Port Table Information View

Access: *From the **Icon Subviews** menu for the Application icon, select **Port Information.***

This view shows a table with traffic information for each of the ports on the system.

Port

The number of the port, from 1 to the number of ports on the system.

Port Status

The connection, or link, status of the port, either up (linked) or down (not linked).

Duplex Status

The duplex status of the port. The values are `half` or `full duplex`.

Forwarded Frames

The number of frames received on this port and forwarded to another port on the system module.

Rcvd Local Frames

The number of frames received on this port.

Port Name
A descriptive string of up to 60 characters used by the network administrator to name the port.

Port Enable
Status of the port; values are `Enable` or `Disable`.

Port Speed
The operating speed for this port. Values are: `ten Mbps` or `one hundred Mbps`.

Autoneg Enable
The auto-negotiation status of the port (`Enable` or `Disable`). When enabled, the port automatically configures its duplex and speed operation.

Flow Control Enable
The state of flow control operation for this port. Flow Control allows you to manage network traffic during congestion periods and to prevent loss of packets when the port buffer thresholds are exceeded. Values are `Enable` or `Disable`.

Port Type
The port physical interface type, listed below.

ieee10BaseT
ieee100BaseTx
ieee100BaseFx-MMF
ieee100BaseFx-SMF
ieee1000BaseCx
ieee1000BaseLx
ieee1000BaseSx
ieee1000BaseT

ElsInOctets
Incoming traffic on this port, measured in octets.

VLAN Table Information View

Access: *From the **Icon Subviews** menu for the Application icon, select **VLAN Information.***

The VLAN Table Information view shows the VLAN table, which is indexed by VLANs.

Vlan Id
The number of the VLAN, from 1 to the number of VLANs supported on the system.

Vlan Name
A descriptive string of up to 60 characters used by the network administrator to name the VLAN.

Vlan Ports
The set of ports in the VLAN. For systems supporting tagged VLAN's, these are the ports to which packets on the VLAN are sent untagged.

Vlan Egress Ports
The set of ports on other VLANs, to which tagged packets destined for this specific VLAN should also be sent.

Vlan Status

Control variable used to enable or disable the operation of the associated VLAN in the system.

Switch Vlan Enable

Globally `Enable` or `Disable` the VLAN operation of the system.

Switch STP Status

Enables or disables the mirroring of transmitted traffic out the mirrored port to the mirroring port. Values are `On` or `Off`.

Port Mirror Configuration View

Access: *From the **Icon Subviews** menu for the Application icon, select **Port Mirror Configuration.***

This view allows you to configure one port to monitor, or mirror, traffic on another active port. You can only “watch” this traffic from the mirroring port.

Rcv Mirror Enable

Enable or disable the mirroring of received traffic. Once this field is enabled, you can monitor mirrored port traffic on the mirroring port.

Mirroring Port

The selected port that is mirroring another port.

Xmit Mirror Enable

`Enable` or `Disable` the mirroring of transmitted traffic out the mirrored port to the mirroring port.

Port Mirroring Status

The Port Mirroring status of the system. Values are `Enable` or `Disable`.

Mirrored Port

The port, or source, that is being mirrored.

VLAN Port Table Information View

Access: *From the **Icon Subviews** menu for the Application icon, select **VLAN Port Information.***

Vlan PortId

The VLAN port number, from 1 to the number of ports in the system.

Vlan Pvid

The port’s VLAN ID. For tagged VLANs, this variable defines a 12 bit port VLAN ID (PVID) used as the identifier of the VLAN in the packet tag.

Vlan Port Type

For tagged VLANs or VLAN port type, either `hybrid` or `access`. Hybrid ports allow both tagged and untagged packets to enter the switch. Access ports only accept untagged packets.

Port Priority Table Information View

Access: *From the* ***Icon Subviews*** *menu for the Application icon, select* ***Port Priority Information.***

This view contains a table that shows the priority level (0 to 7) each port assigns to untagged traffic.

Performance Views

This section provides brief descriptions of the Performance views available for models of FN and ELS devices in SPECTRUM.

Performance views provide statistical information about the operation of the device and packet information for the device and its ports. The following performance views are described in this section:

- *Device Performance View (Page 27)*
- *Interface Performance View (Page 28)*
- *Port Performance View (Page 28)*
- *Application Performance View* (Page 29)

For more information on Performance views, refer to the ***SPECTRUM Views*** documentation.

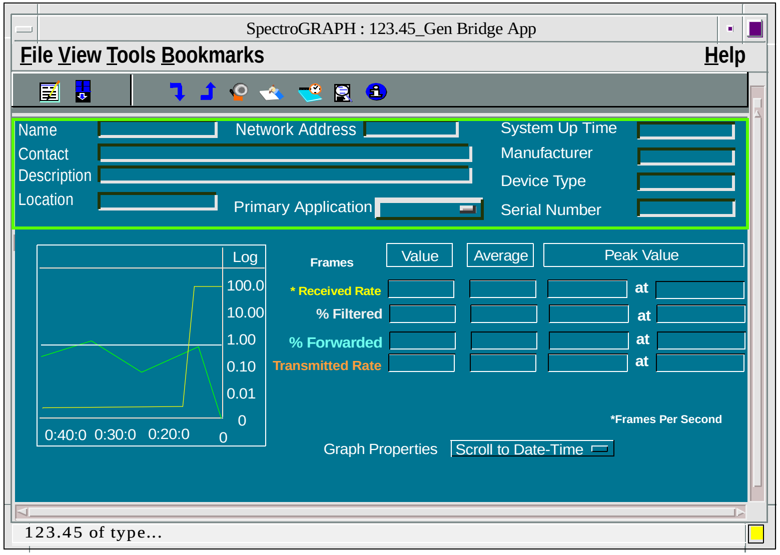
Device Performance View

Access: *From the **Icon Subviews** menu for the Device icon, select **Performance.***

This view (Figure 9) includes both a graph and a table that show current, average, and peak values for the following performance statistics:

- Received Rate
- % Filtered
- % Forwarded
- Transmitted Rate

Figure 9: Device Performance View



Interface Performance View

Access: *From the **Icon Subviews** menu for the selected interface in the Interface Device View, select **Performance.***

This view shows the following performance statistics:

- Load
- Packet Rate
- % Error
- % Discarded

Port Performance View

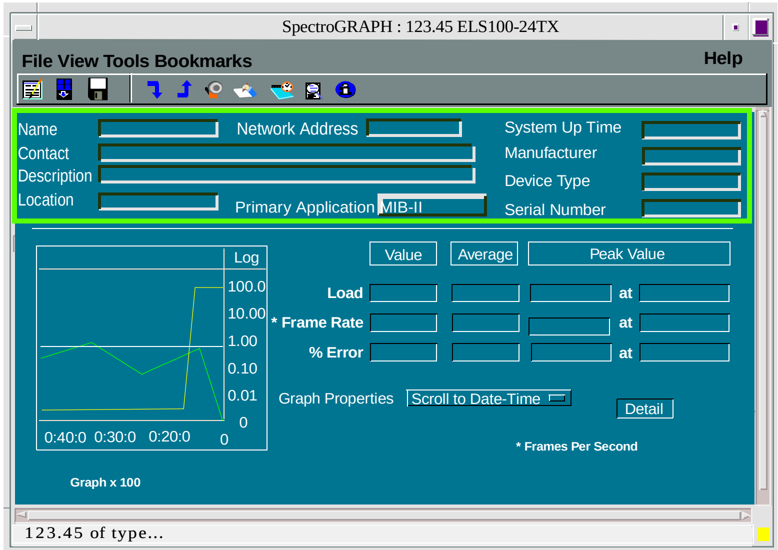
Access: *From the **Icon Subviews** menu for a selected port label in the ELS100-24 Chassis Device View, select **Performance.***

This view provides performance information for individual ports. The view shows the following statistics:

- Load
- Frame Rate
- % Error

Figure 10 shows an example of this view.

Figure 10: Module/Port Performance View



Application Performance View

Access: *From the **Icon Subviews** menu for any Application icon, select **Performance.***

An Application Performance view is available for each supported application. Statistics that appear in these performance views differ, depending upon the application. An FN-10 Application Performance view shows the following statistics:

- Frame Rate
- % Received
- % Transmitted
- % Error
- % Discarded

Configuration Views

This section describes the various Configuration views and subviews available for models of FN and ELS devices in SPECTRUM.

Configuration views allow you to view and modify current settings for the modeled device and its interfaces, ports, and applications. The following Configuration views are available for models of FN10/100 and ELS10/100 devices (depending upon the device itself):

- *Device Configuration View (Page 30)*
- *Interface Configuration View (Page 31)*
- *Generic Interface Trap Configuration View (Page 31)*

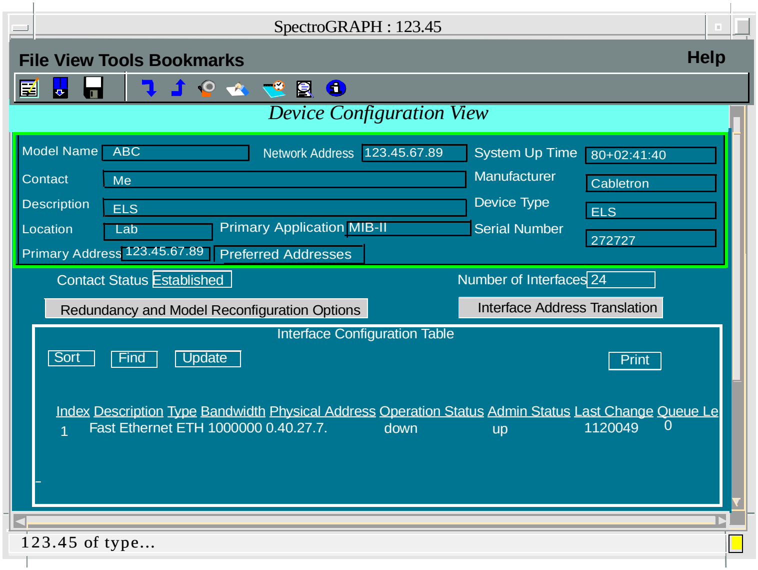
Device Configuration View

Access: *From the* ***Icon Subviews*** *menu for the Device icon, select* ***Configuration****.*

This view (Figure 11) provides status and configuration information about the device as a whole as well as on a port-by-port basis. It also provides button access to an Interface Address Translation table and a subview that lets you establish redundancy for the model.

Fields and column headings within the Device Configuration view and its subviews are explained in detail in ***SPECTRUM Views*** documentation.

Figure 11: ELS100 Device Configuration View



Interface Configuration View

*Access: From the **Icon Subviews** menu for a selected Interface icon in the Interface Device view, select **Interface Configuration**.*

This view provides the following information for the selected interface:

Operation Status
The current operational state of the interface (On, Off, or Testing).

Admin. Status
The desired operational state of the interface (On, Off, or Testing).

Last Change
The System UpTime value when the interface entered its current operational state.

IP Address/Network Mask
This window provides a list of the user-defined names and IP addresses for the interface.

Physical Address
The Ethernet (MAC) address of the interface.

Bandwidth
The estimated bandwidth of the interface, measured in bits per second. For interfaces that do not vary in bandwidth, or no accurate estimate can be made, a nominal bandwidth is provided.

Queue Length
The length of the outbound packet queue, in packets.

Packet Size
The largest packet that can be transmitted or received by the port, displayed in octets.

Generic Interface Trap Configuration View

*Access: From the **Icon Subviews** menu for an Interface icon in the Device view, select **Model Information.** In the Model Information view, click the **Trap Configuration** button to access the Generic Interface Trap Configuration view.*

This view allows you to enable or disable trap events and set alarms on Link down traps. Click the **Button Explanations** button for more information.

Model Information Views

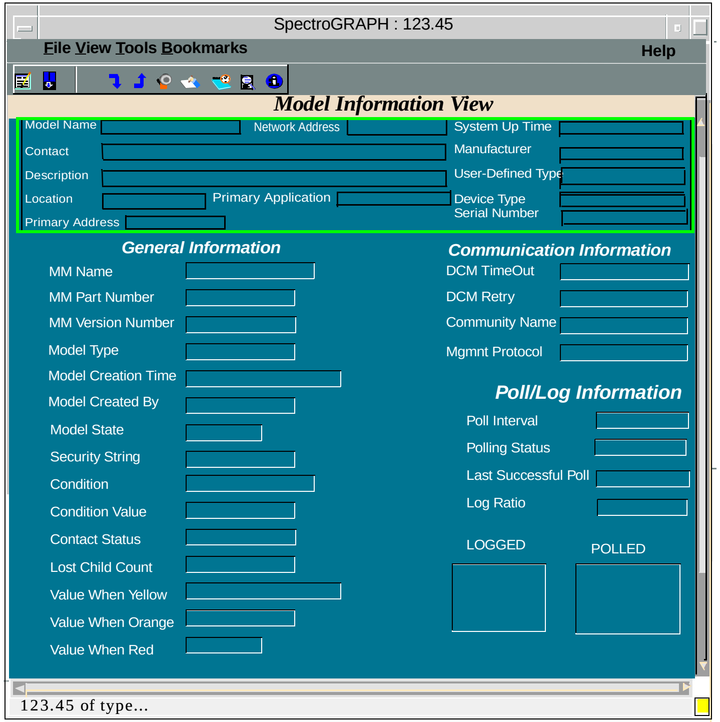
This section provides a brief description of the Model Information views available for models of FN and ELS devices in SPECTRUM.

Access: *From the **Icon Subviews** menu for the Device icon, select **Model Information.***

Model Information views provide descriptive and configuration information about SPECTRUM models of individual devices, interfaces, and applications. Figure 12 shows an example of the Model Information view accessed from the **Icon Subviews** menu for the model's Device icon. Model Information views are also available for each of the Interface icons in the Interface Device and Interface Device Topology views, and for each of the Application icons in the Application view. Although these views may vary slightly depending on the particular entity being modeled, their basic layout and content are similar for most SPECTRUM management modules. These views are described in more detail in the ***SPECTRUM Views*** documentation.

In the Model Information view for Interface icons, the *Trap Configuration* button accesses the Trap Configuration view. Refer to the *Generic Interface Trap Configuration View* (Page 31).

Figure 12: Model Information View



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